

MATERIAL SAFETY DATA SHEET

Chemical Product

Product Name: 2,4-DINITROPHENYL HYDRAZINE AR

CAS#: 119-26-6

Synonym: Not Available.

Chemical Name: 2,4-Dinitrophenyl Hydrazine AR

Chemical Formula: C₆H₆N₃O₂

Composition and Information on Ingredients

Name	S.K.U	% by Weight
2,4-Dinitrophenyl Hydrazine AR	GCS-4158	100

Hazards Identification

Potential Acute Health Effects:

Very hazardous in case of ingestion, of inhalation. Hazardous in case of skin contact (irritant, permeator), of eye contact (irritant).

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.
The substance is toxic to lungs, the nervous system, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage.

First Aid Measures

Eye Contact:

Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention.

Skin Contact:

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention.
Wash contaminated clothing before reusing.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion:

Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

Fire and Explosion Data

Flammability of the Product: Flammable

Auto-Ignition Temperature: Not Available

Flash Points: Not Available.

Flammable Limits: Not Available.

Products of Combustion: These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...).

Fire Hazards in Presence of Various Substances: Flammable in presence of oxidizing materials.

Explosion Hazards in Presence of Various Substances:

Explosive in presence of open flames and sparks, of heat. Slightly explosive to explosive in presence of shocks.

Fire Fighting Media and Instructions:

Flammable solid. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Accidental Release Measures**Small Spill:**

Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill:

Flammable solid. Stop leak if without risk. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined

areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

Handling and Storage

Precautions:

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment if ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage:

Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. Keep container dry. Keep in a cool place.

Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not Available.

Physical and Chemical Properties

Physical state and appearance: Solid.

Odor : Not Available.

Taste : Not Available.

Molecular Weight :
198.14 g/mole

Color : Not Available.

pH (1% soln/water) : Not available.

Boiling Point	: Not available.
Melting Point	: 200°C (392°F)
Critical Temperature	
: Not available.	
Specific Gravity	: Not available.
Vapor Pressure	: Not available.
Vapor Density	: Not available.
Volatility	: Not available.
Odor Threshold	: Not available.
Water/Oil Dist.	
Coeff. :	
Not available.	
Ionicity (in Water) :	
Not available.	
Dispersion	
Properties :	
Not available.	
Solubility	: Insoluble in cold water.

Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Non-corrosive in
presence of glass.

Special Remarks on Reactivity:

Not available.

Special Remarks on Corrosivity:

Not available.

Polymerization: No.

Toxicological Information

Routes of Entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 654 mg/kg [Rat].

Chronic Effects on Humans: The substance is toxic to lungs, the nervous system, mucous membranes.

Other Toxic Effects on Humans:

Very hazardous in case of ingestion, of inhalation. Hazardous in case of skin contact (irritant, permeator).

Special Remarks on Toxicity to Animals: Not Available.

Special Remarks on Chronic Effects on Humans: Not Available.

Special Remarks on other Toxic Effects on Humans: Not Available.

Toxicological Data on Ingredients: 2,4-Dinitrophenyl Hydrazine: ORAL(LD50): Acute: 654 mg/kg [Rat].

Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short/long term degradation products are to be expected.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

Disposal Considerations

Waste Disposal:

Transformation Information

Land transport (ADR-RID)

Proper shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S.

UN N°: 1325

H.I. nr: 40

ADR - Class: 4.1

Labelling - Transport: 4.1 : Flammable solids, self-reactive substances and desensitized explosives.

ADR - Group: II

Sea transport (IMDG) [English only]

Proper shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S.

UN N°: 1325

IMO-IMDG - Class or division: 4.1 : Flammable solids, self-reactive substances and desensitized explosives.

IMO-IMDG - Packing group: II

Air transport (ICAO-IATA) [English only]

Proper shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S.

UN N°: 1325

IATA - Class or division: 4.1 : Flammable solids, self-reactive substances and desensitized explosives.

IATA - Packing group: II

Other Regulatory Information

Federal and State Regulations: TSCA 8(b) inventory: 2,4-Dinitrophenyl Hydrazine

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada): CLASS B-4: Flammable solid. CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC): R22- Harmful if swallowed. R36/38- Irritating to eyes and skin.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 3

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 3

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.



Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

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